

Remarks/Arguments:

Applicant wishes to thank the Examiner for his detailed comments. As Examiner has grouped his actions by sections, Applicant will respond to these sections one by one.

1. No response is believed necessary.

Claim Rejections –35USC § 102(b):

2. Examiner has stated that:

“Claims 1, 3-4 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Nguyen (US 2002/0147518 A1).

“Regarding claim 1, **Nguyen** discloses a system for improving manufacturing yields, comprising: at least one manufacturing facility ...identification plan for said unprocessed parts, by which each unprocessed part is given unique and traceable unprocessed part identification data ...; processing equipment ...at least one computer terminal connected to a database into which said unprocessed parts identification data, said processed parts identification data and said processing equipment identification data is stored, and related.....

“...**Nguyen** discloses testing equipment by which testing of said processed parts can be conducted ...

“...**Nguyen** discloses said database is accessible from multiple computer terminals...

“...multiple computer terminals are connected by an intranet ...

“...processing equipment is located in more than one manufacturing facility...

“...testing of said processed parts is done in a separate manufacturing facility from the one in which at least one of said at least one processing stage is performed ...”

In the claims as amended, independent claim 1 now includes the limitation added in lines 3-4:

“A) providing an identification plan for parts, whereby each part is given unique and traceable identification data by assigning numbers to batches of parts and further assigning data related to positions within said batch of parts;”

In the claims as amended, independent claim 14 now includes the limitation added in lines 3-4:

“A) providing an identification plan for parts, whereby each part is given unique and traceable identification data by assigning numbers to disk batches and further assigning position data related to positions within said disk batches;”

5 Applicant respectfully asserts that these limitations are not found in **Nguyen**, and therefore cannot be said to be anticipated by the cited reference. The identification plan in Nguyen assigns “a unit control identifier... most preferably a bar code..” to each component Page 2 [0023, lines 1-6]. This plan may be practical for larger scale components such as printers, but is not workable for
10 smaller components such as disk drive parts. There is also the undesirability of affixing physical labels such as bar codes to components for which the slightest contamination of parts can lead to catastrophic failure.

Since independent claims 1 and 14 as amended all include this feature, and since dependent claims 2-13 and 15-25 all inherit this assertedly novel feature,
15 Applicant respectfully asserts that the claims are not anticipated by the cited reference. Applicant therefore respectfully requests that the rejection be withdrawn and claims 1, 3-4, and 6-8 be allowed.

Claim Rejections –35USC § 103:

20 3. No response is believed necessary.

4. Examiner has stated that:

“Claims 2, 5, 9, 10-14 and 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen as applied to claim 1 above and further in view of “Western Digital Rewrites Industry Standards for Quality with a Global Data Warehouse”, Pages 1d.

25 “Nguyen discloses the limitations of claims 1, 3-4 and 6-8 above but fails to disclose some limitations of claims 15, 17-18 and 20-22 and further fails to disclose the limitations of claims 2,5, 9-14, 16, 19, and 23-28” (**should be 25**). “However, ‘Western Digital Rewrites Industry Standards for Quality with a Global Data Warehouse’, Pages 1d discloses such limitations as follows:

“As for claim 2, said identification plan for unprocessed parts is achieved by assigning numbers to batches of parts and further assigning data related to positions within said batch of parts (Page 2, left Col., paragraph 2, i.e., “Finding the root of quality issues requires the ability to trace separate part to their lot”; Page 3, left Col., paragraph 4, i.e., a reseller calling to report a faulty hard drive may ask if any other hard drives in a particular shipment or lot number may be affected... the account representative.., can respond immediately to the reseller’s concerns).

“As for claim 5 said multiple computer terminals are connected by the Internet (Page 3, left Col., paragraph 3, i.e., web browsers).

“As for claim 9 said testing of said processed parts includes shipping finished manufactured products to consumers and monitoring field problems...

“As for claims 10-14, a plan for addressing problems ...

“said Problem identification of said processed parts includes ...

“said Analysis includes...

“said Analysis includes...

“said Analysis includes...

“With respect to claims 15, 17-18, and 20-22, the same citations applied above to claims 1, 3-4, and 6-8, respectively, apply as well for claims 15, 17-18, and 20-22, with the exception that the system is used for HDDs (Hard drive disks). ‘Western Digital Rewrites Industry Standards for Quality with a Global Data Warehouse’, discloses tracking global quality data for hard drive disks (Page 3, left Col., paragraph 4; and Page 3, right Col, paragraphs 3 and 4, Le., ‘The new ability to pinpoint individual component-level effect before hard drives are shipped to the customer, as well as trace back the cause of potential failures in the field’).

“As for claims 16, 19, and 23-25, the same citations applied to claims 2, 5, and 9-14, respectively, apply as well for claims 16, 19, and 23-28 “ (should be 25). “Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the apparatus and method for monitoring manufacturing status of Nguyen with the teachings of ‘Western Digital Rewrites Industry Standards for Quality with a Global Data Warehouse’, Pages 1-4 because it would provide an improved system wherein managers can easily find data on specific products and conduct analysis on shipments, enabling them to serve customers proactively and with greater efficiency (Page 3, Right Col., Paragraph 5).”

As Examiner has pointed out, the Western Digital disclosure is quoted as saying “Finding the root of quality issues requires the ability to trace separate part to their lot.” Applicant respectfully asserts that this is quite different than tracing and identifying a specific part within that lot with its associated history, and requires a further level of traceability than that suggested by the Western Digital

article. This further level is not trivial, and is a significant advance over batch identification schemes such as Western Digital's. It cannot fairly be said to be obvious in view of it, as will be seen below.

Identification of a component as part of a lot means that it may be possible
5 to recall the entire lot of components, but does not allow further traceability of production problems that the present invention allows by identification of individual parts, whose history may be traced through a number of processing stations, machines, or even vendor history.

As an example, let's suppose that Components 1-10 may be grouped into a
10 lot, two of which, say Components 1, 3 and 4, are found to be defective in some respect. Let's suppose that all components 1-10 were processed by Machine A, but further, that Components 1-5 were previously processed by Machine B before they were processed by Machine A, while Components 6-10 were previously processed by Machine C, which performs a parallel operation to Machine B.

15 Further, let's suppose that Components 1, 3, 5, 7, and 9 were supplied by Vendor V1, while Components 2, 4, 6, 8 and 10 were supplied by Vendor V2.

In a scheme such as Western Digital's, where only the lot is identified, the tendency would be to scrap all Components 1-10 and inspect Machine A for malfunctions.

20 However, using the system of the present invention, where individual parts are referenced and associated with processing histories, including vendor history and previous processing steps, further analysis is possible. Components 1 and 3 came from V1, while Component 4 came from V2, but components from both vendors failed, so the supplying vendor may not be a factor. All components were

processed by Machine A, but they were also both previously processed by Machine B, whereas non-failing components 6-10 were not. Now, instead of scrapping the entire lot of components 1-10, components 2 and 5 may be monitored to see if they have problems, and if so, inspection of Machine B may be called for.

5 This further level of traceability thus allows more intricate and precise monitoring of the overall production system, with great opportunities for increasing efficiency and reducing costs. It may even provide information that will aid in qualifying vendors for quality review. These advantages cannot be said to be obvious in view of this or any other cited references.

10 Therefore, neither reference, nor any combination of cited references, includes the elements of the claimed invention as found in amended claims 1 and 14, and since dependent claims 2-13 and 15-25 all inherit this assertedly novel feature, the combination cannot be said to be obvious in view of them. Applicant therefore respectfully requests that the rejection be withdrawn and claims 2, 5, 9,
15 10-14 and 15-25 be allowed.

Claim Rejections –Double Patenting:

5. Examiner has stated that:

20 “The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would e covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: providing an identification plan for parts, whereby each part is given unique and traceable identification data. Furthermore, there is no apparent reason why applicant would
25 be prevented from presenting claims corresponding to those of the instant application in the other copending application.”

Applicant respectfully disagrees with several points in the previous statement. First, there is substantially different subject matter between the claims of the instant application and those found in the co-pending application, namely those in the present application involve a method of improving yield of
5 manufacturing products, whereas the co-pending application presents claims to a system for improving yields, this system including physical objects and devices not found in the method claim of the present application. The two applications were filed separately as it has been the experience of Applicant's Attorney that any patent application filed with both method and apparatus claims (including those of
10 a system having physical components) will be subject to a restriction requirement by examiners in the Patent Office. An election will then be required and then a divisional application must be filed on the non-elected invention. Thus, two separate applications were filed in an attempt to save time and effort.

However, in order to advance the prosecution of this case, a Terminal
15 Disclaimer is attached, as the invention is commonly owned and has common inventors. This is itself considered a moot point, as both applications were filed on the same day and presumably will have identical terms, anyway.

Conclusion:

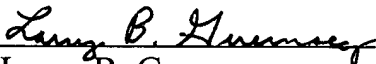
Applicant has endeavored to put this case into complete condition for allowance. It is thought that the §102 and §103 rejections have been corrected by amendment or were unfounded on the references cited. A terminal Disclaimer has been filed in order to overcome the Double Patenting rejection, which is considered a moot point anyway, as both applications have the same filing date. Applicant therefore respectfully asks that the rejections be withdrawn and that allowance of all claims presently in the case now be granted.

If the Examiner would like to discuss any of the points involved in the Response, he is urged to contact Applicant's Agent at the numbers included below.

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